

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-35. (canceled)

36. (new) An information record medium on which there are recorded in a non-transitory state:

a series of content information which is constructed from at least one elementary stream and which is stored as a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream;

play list information for defining reproduction sequence of the content information by a unit of item, wherein the item constitutes the content information and is accessible upon reproducing; and

object information for indicating a relationship between packets and the elementary stream of the content information,

the play list information including: item information for specifying each item which constitutes the content information by indicating both of a reproduction start time and a reproduction end time of the item and for specifying one portion of the object information for the content information,

the object information further including an address of the content information which is specified by the item information,

each of the content information, the play list information and the object information being recorded into a different area, respectively,

wherein

there are recorded on the information record medium in a non-transitory state: sub-picture information, (i) which is constructed from at least one elementary stream, (ii) which is stored in the plurality of packets, each of the plurality of packets stores a fragment of the elementary stream, for displaying at least one sub-picture, (iii) which includes cut out range information for indicating cutting out range of the sub-picture information, (iv) which includes display position information for indicating a display position at which the sub-picture information, which is cut out on the basis of the cut-out range information, is displayed on the content information, (v) which is recorded into same area as the content information is recorded, and (vi) which is superimposed on a display of the content information during a reproduction of the content information,

the play list information further includes: slave item information for specifying other portion of the object information for the sub-picture information as a slave item,

the item information further includes information which indicates an identification information of the slave item information, and

the object information further indicates a relationship between packets and the elementary stream of the sub-picture information, and further includes an address of the sub-picture information which is specified by the slave item information.

37. (new) The information record medium according to claim 36, wherein the sub-picture information is displayed with being superimposed on or in place of one portion of the content information or is not displayed at all.

38. (new) The information record medium according to claim 36, wherein the sub-picture information specified by the slave item information is further recorded in the play list information, as common information commonly used by a plurality of slave items.

39. (new) The information record medium according to claim 36, on which there is further recorded in a non-transitory state reproduction control information for controlling such that the sub-picture information specified by the slave item information is displayed with being superimposed on or in place of one portion of the content information corresponding to the sub-picture information specified by the slave item information or is not displayed at all.

40. (new) An information record apparatus, comprising:  
a first device for recording a series of content information which is constructed from at least one elementary stream and which is stored as a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream;  
a second device for recording play list information for defining reproduction sequence of the content information by a unit of item, wherein the item constitutes the content information and is accessible upon reproducing; and  
a third device for recording object information for indicating a relationship between packets and the elementary stream of the content information,

the play list information including: item information for specifying each item which constitutes the content information by indicating both of a reproduction start time and a reproduction end time of the item and for specifying one portion of the object information for the content information,

the object information further including an address of the content information which is specified by the item information,

each of the content information, the play list information and the object information being recorded into a different area, respectively,

wherein

the first record device further records sub-picture information, (i) which is constructed from at least one elementary stream, (ii) which is stored in the plurality of packets, each of the plurality of packets stores a fragment of the elementary stream, for displaying at least one sub-picture, (iii) which includes cut out range information for indicating cutting out range of the sub-picture information, (iv) which includes display position information for indicating a display position at which the sub-picture information, which is cut out on the basis of the cut-out range information, is displayed on the content information, (v) which is recorded into same area as the content information is recorded, and (vi) which is superimposed on a display of the content information during a

reproduction of the content information,

the play list information further includes: slave item information for specifying other portion of the object information for the sub-picture information as a slave item,

the item information further includes information which indicates an identification information of the slave item information, and

the object information further indicates a relationship between packets and the elementary stream of the sub-picture information, and further includes an address of the sub-picture information which is specified by the slave item information.

41. (new) An information record method, comprising:

a first process of recording a series of content information which is constructed from at least one elementary stream and which is stored as a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream;

a second process of recording play list information for defining reproduction sequence of the content information by a unit of item, wherein the item constitutes the content information and is accessible upon reproducing; and

a third process of recording object information for indicating a relationship between packets and the elementary stream of the content information,

the play list information including: item information

for specifying each item which constitutes the content information by indicating both of a reproduction start time and a reproduction end time of the item and for specifying one portion of the object information for the content information,

the object information further including an address of the content information which is specified by the item information,

each of the content information, the play list information and the object information being recorded into a different area, respectively,

wherein

the first record process further records sub-picture information, (i) which is constructed from at least one elementary stream, (ii) which is stored in the plurality of packets, each of the plurality of packets stores a fragment of the elementary stream, for displaying at least one sub-picture, (iii) which includes cut out range information for indicating cutting out range of the sub-picture information, (iv) which includes display position information for indicating a display position at which the sub-picture information, which is cut out on the basis of the cut-out range information, is displayed on the content information, (v) which is recorded into same area as the content information is recorded, and (vi) which is superimposed on a display of the content information during a reproduction of the content information,

the play list information further includes: slave item information for specifying other portion of the object information for the sub-picture information as a slave item,

the item information further includes information which indicates an identification information of the slave item information, and

the object information further indicates a relationship between packets and the elementary stream of the sub-picture information, and further includes an address of the sub-picture information which is specified by the slave item information.

42. (new) An information reproduction apparatus for reproducing the information record medium according to claim 36,

the information reproduction apparatus comprising:

a reproduction device capable of reproducing the content information, the sub-picture information, the play list information and the object information;

a displaying and outputting device capable of displaying and outputting the content information and the sub-picture information; and

a control device for controlling the reproduction device to reproduce the content information and the sub-picture information, in accordance with the item information and the slave item information included in the play list information and the object information reproduced by the reproducing device.



43. (new) The information reproduction apparatus according to claim 42, further comprising a buffer memory for maintaining the reproduced sub-picture information in a readily displayable and outputtable condition, for a predetermined period, regardless of whether or not the reproduced sub-picture information is displayed and outputted by the displaying and outputting device.

44. (new) An information reproduction method of reproducing the information record medium according to claim 36 on an information reproduction apparatus comprising: (i) a reproduction device capable of reproducing the content information, the sub-picture information, the play list information and the object information; and (ii) a displaying and outputting device capable of displaying and outputting the content information and the sub-picture information,

the information reproduction method comprising:

a first control process of controlling the reproducing device to reproduce the play list information and the object information; and

a second control process of controlling the reproducing device to reproduce the content information and the sub-picture information, in accordance with the item information and the slave item information included in the play list information and the object information reproduced by the reproducing device.

45. (new) A computer-readable recording medium recording thereon, in a non-transitory state, a computer program for a record control to control a computer disposed at the information record apparatus according to claim 40,

the program making the computer function as the first record device, the second record device and the third record device.

46. (new) A computer-readable recording medium recording thereon, in a non-transitory state, a computer program for a reproduction control to control a computer disposed at the information reproduction apparatus according to claim 42,

the program making the computer function as the reproduction device, the displaying and outputting device and the control device.